

**Amendments to the Drawings**

Please replace Fig. 14 with the attached replacement Fig. 14.

### Remarks

The Applicants thank the Examiner for the thoughtful consideration of the amendment and arguments filed May 26, 2005. The withdrawal of the various rejections and objections set forth in the previous Official Action is noted with appreciation.

Claims 5 and 7 are pending in the application. The claims have been rejected under 35 U.S.C. § 112 ¶2 based on the recitation “the 61 amino acid residues as indicated by black dots in the consensus sequence shown in Figure 14” in Claim 7. In this respect, the Examiner correctly points out that there are only sixty (60) black dots associated with the consensus sequence of Fig. 14. Specifically, the last black dot of subdomain 7 is shown at a position that is not part of the consensus sequence. The Applicants thank the Examiner for pointing out the inadvertent error in original Fig. 14. A substitute drawing sheet with corrected Fig. 14 is submitted herewith. For the reasons set forth below in connection with the rejection under 35 U.S.C. § 112 ¶1, the correction of Fig. 14 does not represent new matter.

Corrected Fig. 14 shows the fifth black dot of subdomain 7 in the appropriate position, and thus correctly identifies all sixty-one (61) amino acid residues in the consensus sequence with black dots. In light of the correction of Fig. 14, it is respectfully submitted that Claim 7 is now clear and definite. Therefore, it is respectfully requested that the rejection under 35 U.S.C. § 112 ¶2 be reconsidered and withdrawn.

Claim 7 has been rejected under 35 U.S.C. § 112 ¶1. Specifically, the Official Action asserts that the recitation “the 61 amino acid residues as indicated by black dots in the consensus sequence shown in Figure 14” represents new matter. It is respectfully submitted that the recitation and the

corrected drawing sheet showing the same subject matter are not new matter.

The black dots shown in Fig. 14 are merely demonstrative in nature. The sixty-one amino acid residues of the consensus sequence themselves were correctly shown in the originally-filed drawing. As explained more fully below, the last position of subdomain 7 is, and was at the time the application was filed, one of the residues of the consensus sequence. Given the guidance in the specification, one of skill in the art could identify the consensus residues in Fig. 14 without the aid of the black dots. The black dots are provided only for the convenience of the viewer, so that the viewer can rapidly find the residues of the consensus sequence without comparing all of the residues in the alignment one by one. The correction as to the position of the last black dot in subdomain 7 merely furthers this purpose. Thus, the black dot itself is merely demonstrative, not substantive. Because the black dot merely highlights that which was readily identifiable from the original drawing, movement of the black dot does not constitute new matter.

Moreover, the Applicants respectfully submit that the erroneous placement of the last black dot in subdomain 7 of Fig. 14 represents an obvious error that would be apparent to one skilled in the art. Submission of the substitute figure does not represent new matter because one skilled in the art would recognize the existence of the error and also the appropriate correction. *In re Oda*, 170 U.S.P.Q. 268 (CCPA 1971); *see also* M.P.E.P. § 2163.07(II).

Support for the correction of Fig. 14 can be found in the specification, for example, on page 11, lines 9-22, and on page 36, lines 14 and 15. On page 11, lines 12-15, the specification explains where the solid dots should be positioned at the bottom of the sequences in Fig. 14. Specifically, the solid black dots mark positions having conserved amino acids in all seven bacterial reverse transcriptases (“RTs”) shown in the drawing. The passage further indicates that “conserved amino

acids" include identical residues and functionally conserved residues. The last position of the consensus sequence of subdomain 7 (e.g., position 407 of Sa163 and Mx162, position 366 of Mx 65, etc.) shows such conserved amino acids among all seven RTs, namely valine in six of the seven RTs and the functionally equivalent isoleucine in the remaining RT (that of Ec73). This position is immediately to the right of where the last black dot was incorrectly placed in Fig. 14, and is obviously the correct position of the last black dot.

One skilled in the art would recognize (as has the Examiner) that the last black dot in subdomain 7 was incorrectly placed in the original drawing at a position that is not part of the consensus sequence. In accordance with the explanation on page 11 of the specification, one skilled in the art would understand that the last black dot should appear at a position in which the amino acids of all seven RTs are conserved. Further, one skilled in the art would recognize that the position immediately to the right of where the black dot appeared in the original drawings includes the seven conserved residues. Thus, the skilled artisan would understand that the last black dot should be associated with that position.

Because, given a fair reading of the specification, one skilled in the art would recognize the existence of the error, and also the appropriate correction, the claim recitation and the submission of the substitute drawing sheet include no new matter. Thus, it is respectfully submitted that the rejection under 35 U.S.C. § 112 ¶1 be reconsidered and withdrawn.

It is respectfully submitted that the entire application is now in condition for allowance, which action is earnestly solicited. If the Examiner believes that any further minor amendments or corrections as to matters of form would expedite the allowance, the Examiner is invited to telephone the Applicants' undersigned representative.

Respectfully submitted,



T. Daniel Christenbury  
Reg. No. 31,750  
Attorney for Applicants

TDC:vbm  
(215)656-3381